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中国丛藓科的新记录属和新记录种*

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A GENUS AND TWO SPECIES OF POTTIACEAE NEW TO CHINA

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Abstract This paper reports one newly recorded genus (*Phascum*) and two newly recorded species (*Phascum cuspidatum* Hedw., *Pottia davalliana* (Sm. ex Drake) C. Jens.) of the Pottiaceae, which are found in Inner Mongolia, China. The specimens are deposited in the herbarium of Inner Mongolia University (HIMC).

Key words Pottiaceae; China

Phascum L. ex Hedw., Spec. Musc. 19. 1801.

Plants small, scattered to loosely caespitose, green to yellowish-brown. Stem erect, simple or forked, without central strand. Leaves larger toward the stem tips, oblong-lanceolate or ovate, acute, mostly piliferous; margins plane or recurved, entire; costa ending below the apex to excurrent, with a single, dorsal stereid band. Upper cells subquadrate, with C-shaped papillae; basal cells rectangular, smooth. Setae very short, erect or curved. Capsules immersed or shortly exserted, cleistocarpous, erect to pendulous, ovoid or subglobose, with blunt apiculus; operculum and peristome absent; calyptra minute, cucullate or rarely mitrate.

This genus was reported by Redfearn and Wu in China in 1986, but exactly no any record had been found in China before the present authors' discovery.

Zander combined *Phascum* and *Tortula* in 1993. However, two types of capsules of the Pottiaceae have been distinguished, i. e., stegocarpous and cleistocarpous. In the stegocarpous type of capsules, cells at the mouth are more or less differentiated into the annular cells and play a role in the dehiscense of the operculum when capsules are mature. In the cleistocarpous type of capsules, the annular cells are not differentiated and the operculum is not separated from the capsule even at maturity. The present authors consider that *Phascum*

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distinctly differs from *Tortula* in having capsules immersed, cleistocarpous with operculum and peristome absent.

Phascum cuspidatum Hedw., Sp. Musc. 22. 1801; Moss. East. N. Am. **1**: 350. 1981.

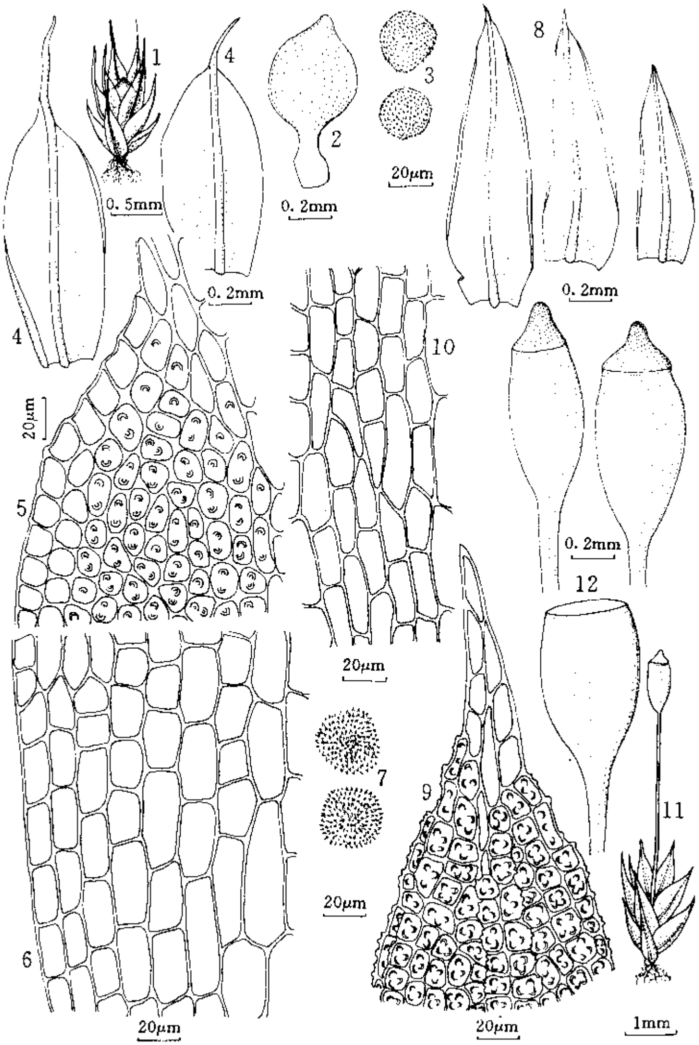

Fig. 1 1~6. *Phascum cuspidatum* 1. plant; 2. capsule; 3. spores; 4. leaves; 5. apical cells of leaf; 6. basal cells of leaf. 7~12. *Pottia davalliana* 7. spores; 8. leaves; 9. apical cells of leaf; 10. basal cells of leaf; 11. plant; 12. capusules.

Plants very small, loosely caespitose, green to yellowish-brown. Stem erect, 2~4 mm high. Leaves contorted when dry, erect-spreading when moist, oblong-lanceolate or ovate, 0.8~1.6 mm long, 0.3~0.4 mm wide, acute and ending in a yellow, smooth awn of varying length; margin recurved, entire; costa excurrent, smooth. Upper cells subquadrate to hexagonal, 8~18×7~13 μm, with C-shaped papillae on both surfaces; basal cells rectangular, smooth. Autoecious. Setae very short, erect or curved; capsule immersed, 1～1.5 mm long, subglobose, bluntly apiculate. Spores spherical, 23～30 μm, densely papillose. Calyptra cucullate, smooth. (Fig. 1: 1～6)

Habitat On calcareous soil and rock in open places.

Specimens examined Inner Mongolia (Nei Monggol): Ergun Youqi, Mordaga, X. L. Bai 613; Oroqen Zizhiqi, Alihe, X. L. Bai 2804; Bairin Youqi, Daban, X. L. Bai 220; Hexigten Qi, Huaggangliang, X. L. Bai 3771(HIMC).

Distribution Mongolia, Russia (Siberia, Caucasus), Europe, N. America and N. Africa.

Pottia davalliana (Sm. ex Drake) C. Jens., Danm. Mosser. 342. 1923; Moss. East. N. Am. **1**: 366. 1981. ——*Gymnostomum davallianum* Sm. ex Drake in Ann. Bot. London **1** (3): 577. 1805.

Plants very small, loosely tufted, green-yellow or yellowish-brown. Stem erect, simple or forked, 1～2 mm high. Leaves somewhat contorted when dry, erect when moist, crowded, larger toward the tips, 1～1.5 mm long, 0.3～0.4 mm wide, ovate lanceolate or lanceolate, acuminate, ending in a strong, reddish-brown apiculus or short awn; margins entire, revolute below; costa excurrent. Upper cells subquadrate to hexagonal, 10～16 μm, with C-shaped papillae. Paroecious. Setae 4～5 mm long, yellow. Capsule erect, ovate to hemispheric, usually wide-mouthed and vertically striate-wrinkled when dry, 0.5～1 mm long; annulus and peristome none; operculum low-conic. Spore 23～27 μm, densely spinulose, yellow-brown. (Fig. 1: 7～12)

Habitat On calcareous soil at roadsides.

Specimens examined Inner Mongolia (Nei Monggol): Hohhot, outskirts, Tun Chikuo 2538(HIMC).

Distribution Europe, W. Asia, N. Africa, N. America and Australia.

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摘要 本文报道了在内蒙古发现的中国丛藓科1个新记录属：球藓属 *Phascum* 和2个新记录种：球藓 *Phascum cuspidatum* Hedw.，刺孢丛藓 *Pottia davalliana* (Sm. ex Drake) C. Jens.。标本保存于内蒙古大学标本室(HIMC)。

关键词 丛藓科；中国